

## Claims

1. Authentication apparatus comprising:

a communicator for communicating with an authenticatable mobile device,

a verifier associated with said authenticatable mobile device to verify that the communication is with an intended one of authenticatable devices, and

an associator for associating the verification with an activity request via a non authenticatable device, thereby to authenticate the activity request of the non-authenticatable device.

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2. The apparatus of claim 1, wherein said authenticable device is a GSM device and said authenticatable link is a GSM link.

3. The apparatus of claim 1, wherein said authenticatable device is a CDMA device and said authenticatable link is a CDMA link.

4. The apparatus of claim 1, wherein said authenticatable device is an IS-136 device and said authenticatable link is an IS-136 link.

5. The apparatus of claim 1, wherein said authenticatable device is a PDC device and said authenticatable link is a PDC link.

6. The apparatus of claim 1, wherein said authenticatable device is an EDGE device and said authenticatable link is an EDGE link.

7. The apparatus of claim 1, wherein said authenticatable device is a WCDMA device and said authenticatable link is a WCDMA link.

8. The apparatus of claim 1, wherein said authenticatable device is a GPRS device and said authenticatable link is a GPRS link.

9. The apparatus of claim 1, wherein said authenticatable device is an Iridium device and said authenticatable link is an Iridium link.

10. The apparatus of claim 1, wherein said secure link involves a subscriber identity module located at said secure mobile device.

11. The apparatus of claim 1, wherein said authenticatable link is a secure link utilizing a subscriber identity module located at said authenticatable device.

12. The apparatus of claim 1, wherein said authenticatable device is a mobile telephone.

13. The apparatus of claim 1, wherein said communication comprises an electronic data communication.

14. The apparatus of claim 13, wherein said electronic data communication comprises electronic messaging.

15. The apparatus of claim 14, wherein said electronic messaging comprises SMS messaging.

16. The apparatus of claim 14, wherein said electronic messaging comprises WAP.

17. The apparatus of claim 14, wherein said electronic messaging comprises email.

18. The apparatus of claim 14, wherein said electronic messaging comprises EMS.

19. The apparatus of claim 14, wherein said electronic messaging comprises MMS.

20. The apparatus of claim 14, wherein said communicator comprises functionality to initiate said communication by sending an initial message to said authenticatable device and functionality to receive a reply to said initial message from said authenticatable device, therewith to authorize said activity request.

21. The apparatus of claim 14, wherein said communicator comprises functionality to receive an initializing communication from either one of said authenticatable device and said non-authenticatable device, and functionality to send a reply to said initial message, therewith to authorize said activity request.

22. The apparatus of claim 14, wherein said communicator comprises functionality to receive an initializing communication from an external device and functionality to establish a link between said authenticatable device and said non-authenticatable device, therewith to authorize said activity request.

23. The apparatus of claim 14, wherein said communicator involves functionality to receive a message from said authenticatable device and functionality to complete said communication by sending a response thereto to said secure authenticatable device, thereby to authorize said activity request.

24. The apparatus of claim 20, wherein said communicator comprises functionality to insert an identifier into said reply for a requesting party to enter via said non-authenticatable device, and wherein said verifier further comprises functionality to determine whether said identifier have been received via said non-authenticatable device.

25. The apparatus of claim 1, wherein said communicator is operable to use an automatic voice for communicating with said authenticatable device.

26. The apparatus of claim 1, wherein said authenticatable device is associated with a payment account, said apparatus further comprising functionality to charge said requested activity to said payment account.

27. The apparatus of claim 1, wherein said requested activity is an Internet browsing activity.

28. The apparatus of claim 1, wherein said requested activity is a point of sale activity.

29. The apparatus of claim 1, wherein said requested activity is access to a network.

30. The apparatus of claim 29, operable to connect to said non-authenticatable device via infra-red access points.

31. The apparatus of claim 1, operable to connect to said non-authenticatable device via Bluetooth access points.

32. The apparatus of claim 1, operable to connect to said non-authenticatable device via at least one WLAN access point.

33. The apparatus of claim 1, being connectable to said non-authenticatable device via a TCP/IP link.

34. The apparatus of claim 1, wherein said communicator is operable to obtain a telephone number for communicating with said authenticatable device, from said non-authenticatable device.

35. The apparatus of claim 1, wherein said communicator is operable to obtain identification data, from said non-authenticatable device, for forming said association.

36. The apparatus of claim 1, wherein said non-authenticatable device is any one of a group comprising a credit card, a smart card, an infra-red device, a Bluetooth device, a PDA, a mobile computer, a fixed computer, and a network of computers.

37. The apparatus of claim 1, further comprising a counter for timing said communication to fail said authorization if said communication is not completed by a predetermined time limit.

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38. The apparatus of claim 1, further comprising a log-in functionality for logging in the non-authenticatable device.

39. The apparatus of claim 1, wherein said associator is connected to an authenticator for indicating that said activity request is approved.

40. The apparatus of claim 39, wherein said authentication communicator is operable to communicate said authentication to an external gateway associated with said non-authenticatable device.

41. The apparatus of claim 39, wherein said authentication communicator is operable to communicate said authentication to a server associated with said requested activity.

42. The apparatus of claim 39, wherein said authentication communicator is operable to communicate said authentication by applying a change to a routing table on a router.

43. A personal transaction card compatible with ATM machines, comprising, in ATM readable format, an ATM routing number and a mobile telephone number, said mobile telephone number being associated with an owner of said personal transaction card.



44. The personal transaction card of claim 43, wherein said numbers are stored on a magnetic strip.

45. The personal transaction card of claim 43, wherein said numbers are stored in an internal integrated circuit.

46. Authentication method comprising:  
communicating via a secure link with an authenticatable device,  
verifying that the communication is with an intended one of authenticatable devices, and  
associating the verification with an activity request via a non-authenticatable device, thereby to authenticate the activity request of the non-authenticatable device.

47. The method of claim 46, wherein said authenticatable device is a GSM device and said authenticatable link is a GSM link.

48. The method of claim 46, wherein said authenticatable device is a CDMA device and said authenticatable link is a CDMA link.

49. The method of claim 46, wherein said authenticatable device is an IS-136 device and said authenticatable link is an IS-136 link.

50. The method of claim 46, wherein said authenticatable device is a PDC device and said authenticatable link is a PDC link.

51. The method of claim 46, wherein said authenticatable device is an edge device and said authenticatable link is an edge link.

52. The method of claim 46, wherein said authenticatable device is a WCDMA device and said authenticatable link is a WCDMA link.

53. The method of claim 46, The method of claim 46, wherein said authenticatable device is a GPRS device and said authenticatable link is a GPRS link.

54. The method of claim 46, wherein said authenticatable device is an Iridium device and said authenticatable link is Iridium link.

55. The method of claim 46, wherein said authenticatable link comprises a secure link involving a subscriber identity module located at said authenticatable device.

56. The method of claim 47, wherein said secure link involves a subscriber identity module located at said authenticatable device.

57. The method of claim 46, wherein said authenticatable device is a mobile telephone.

58. The method of claim 46, wherein said communication comprises electronic data communication.

59. The method of claim 58, wherein said electronic data communication comprises electronic messaging.

60. The method of claim 59, wherein said electronic messaging comprises SMS messaging.

61. The method of claim 60 comprising initiating said communication by sending an initial message to said authenticatable device and functionality to receive a reply to said initial message from said authenticatable device, therewith to authorize said activity request.

62. The method of claim 60, wherein said communicating involves receiving a message from said authenticatable device and completing said communication by sending a response thereto to said authenticatable device, thereby to authorize said activity request.

63. The method of claim 62, comprising inserting a password into said reply for a requesting party to enter via said non-authenticatable device, and determining whether said password has been received via said non-authenticatable device.

64. The method of claim 46, comprising using an automatic voice for communicating with said authenticatable device.

65. The method of claim 46, wherein said authenticatable device is associated with a payment account, said method further comprising charging said requested activity to said payment account.

66. The method of claim 46, wherein said requested activity is an Internet browsing activity.

67. The method of claim 46, wherein said requested activity is a point of sale activity.

68. The method of claim 46, wherein said requested activity is access to a network.

69. The method of claim 46, comprising using infra-red.

70. The method of claim 46, comprising using bluetooth.

71. The method of claim 46, said non-authenticatable device being a TCP/IP link.

72. The method of claim 46, comprising obtaining a telephone number for communicating with said authenticatable device, from said non-authenticatable device.

73. The method of claim 46, wherein said non-authenticatable device is any one of a group comprising a credit card, a smart card, an infra-red

device, a Bluetooth device, a PDA, a mobile computer, a fixed computer, and a network of computers.

74. The method of claim 46, further comprising timing said communication to fail said authorization if said communication is not completed by a predetermined time limit.

75. The method of claim 46, further comprising a logging in procedure for logging in the non-authenticatable device.

76. The method of claim 46, comprising outputting an indication that said activity request is approved.

77. The method of claim 76, wherein said indication is output to an external gateway associated with said non-authenticatable device.

78. The method of claim 76, wherein said indication is output to a server associated with said requested activity.

79. The method of claim 76, wherein said indication is output by applying a change to a routing table on a router.